Bonneville Power Administration (BPA)
Transmission Services

Available Transfer Capability (ATC) Methodology
ATC Impacts of Long-Term Firm Requests, Version 2

Posted: December 18, 2006

Effective: November 21, 2006

Table of Contents

1 Definitions

Unless otherwise defined herein, capitalized terms are defined in BPA Transmission Services' Open Access Transmission Tariff (Tariff), Rate Schedules, ATC Methodology, the Business Practices, and/or Federal Energy Regulatory Commission (FERC) Standards and Communication Protocols for OASIS.

1.1 Algorithm for Resources Dispatched Off: Half of any assumed generation decrease is deemed to occur ratably across the 5 non-federal MidC hydroelectric generating projects. The remaining half is deemed to decrease at the 10 major Federal Columbia River Power System (FCRPS) hydroelectric generators in proportion to their relative share of generation otherwise dispatching

1.2 Algorithm for Resources Dispatched On: Half of any assumed generation increase is deemed to occur ratably across the 5 non-federal MidC hydroelectric generating projects. The remaining half is deemed to increase at the 10 major Federal Columbia River Power System (FCRPS) hydroelectric generators in proportion to their relative share of generation otherwise dispatching

1.3 Deferral Request: Request to defer or apply for extension of the start of long-term firm transmission service, per section 17.7 in the Tariff

1.4 Evaluated Point-of-Delivery (POD)/Point-of-Receipt (POR): The POD(s) and/or POR(s) used to determine the impact of a long-term firm request

1.5 Export POD: Any POD submitted in a long-term firm request that will impact an External Interconnection or Intertie

1.6 Network Integration Modification of Service Request: Request to make changes or modifications to the terms of firm Network Integration service, per section 30.2 in the Tariff

1.7 Network Composite POD: A weighted aggregation into a single load group Network POD of 4-5 years of projected load growth at all Network PODs across approximately 70 Northwest geographic zones

1.8 Network POD: Any POD submitted in a long-term firm request not considered an Export POD

1.9 Original Long-Term Firm (LTF) Request: Initial request for reservation of long-term firm transmission service submitted to BPA Transmission Services

1.10 PUF (Path Utilization Factor) Calculation: An equation based on a POD, POR, and Transmission Demand used to determine the impacts to Network Flowgates

$(\text{POR } PUF_A - \text{POD } PUF_A) * \text{Transmission Demand} = \text{impact to } Flowgate_A$

1.11 Renewal Request: Request to renew an expiring long-term firm transmission reservation for the long-term, per section 2.2 of the Tariff

1.12 Requested POD/POR: The POD/POR submitted in a LTF Request

2 Analyzing Long-Term Firm Requests

LTF Requests for transmission service impacting Network Flowgates are analyzed using the following methodology:

2.1 Original LTF Requests

2.1.1 PUF calculations are prepared for each Original LTF Request RECEIVED, to determine the impacts of the requested service on Network Flowgates.

2.1.2 The Evaluated POD/POR used to prepare the PUF calculation will be determined based on the Requested POD/Requested POR as provided in the following matrix:

	Requested POR	Requested POD		Evaluated POR	Evaluated POD
2.1.2.1	Any POR	Network POD		Requested POR	Network Composite POD
2.1.2.2	Any POR	Export POD		Requested POR	Requested POD

2.1.3 When the Original LTF Request is CONFIRMED the positive PUF calculation impacts will be decremented from posted LTF ATC values; any negative impacts will also be decremented, to increase posted LTF ATC values.

2.2 REDIRECT and Network Integration Modification of Service Requests

2.2.1 PUF calculations are prepared for each REDIRECT and Network Integration Modification of Service Request RECEIVED, to determine the impacts of the requested service on Network Flowgates.

2.2.2 The Evaluated POD(s)/POR(s) used to prepare the PUF calculation(s) will be determined based on the Requested POD/Requested POR as provided in the following matrix:

	Requested POR	Requested POD		Evaluated POR	Evaluated POD
2.2.2.1	No change from existing POR	Change from Network POD to different Network POD		Original POR	Requested POR[2]
2.2.2.2	No change from existing POR	Change from Network POD to Export POD		Algorithm for Resources Dispatched On	Requested POD
2.2.2.3	No change from existing POR	Change from Export POD to Network POD		Original POR	Algorithm for Resources Dispatched Off
2.2.2.4	No change from existing POR	Change from Export POD to different Export POD		Original POD	Requested POD
2.2.2.5	Change from existing POR1	Any Network POD		Requested POR	Original POR
2.2.2.6	Change from existing POR1	Change from Network POD to Export POD		(A) Algorithm for Resources Dispatched On	(A) Original POR[3]
				(B) Requested POR	(B) Requested POD[3]

	Requested POR	Requested POD		Evaluated POR	Evaluated POD
2.2.2.7	Change from existing POR1	Change from Export POD to Network POD		(A) Existing POR	(A) Existing POD[4]
				(B)Requested POR	(B) Algorithm for Resources Dispatched Off[4]

[1] If an existing POR is not associated with any source of generation, then a request to redirect that POR will be evaluated as an Original Request under section 2.1.

[2] Impacts of Long-Term Firm Redirect Requests with a Requested POD of Portland General Electric's system will be calculated using section 2.2.2.2 and will use an Evaluated POD of John Day Intertie 500 kV.

[3] Impacts of Path (A) are added to the impacts of Path (B) – negative values are included in this calculation (B + A).

[4] Impacts of Path (A) are subtracted from the impacts of Path (B) – negative values are included in this calculation (B – A).

2.2.3 When the long-term Firm Redirect Request is CONFIRMED the positive PUF calculation impacts will be decremented from posted LTF ATC values; any negative impacts will also be decremented, to increase posted LTF ATC values.

2.3 Evaluation of potential Challengers for the demand capacity of DEFERRAL and RENEWAL Requests

2.3.1 PUF calculations are prepared for each DEFERRAL REQUEST CONFIRMED and for each RENEWAL Request RECEIVED, to determine whether challengers for its demand capacity exist.

2.3.1.1 The DEFERRAL or RENEWAL Customer is referred to as the Defender.

2.3.1.2 The potential Challenger is referred to as the Challenger.

2.3.2 There must be sufficient ATC to accommodate the impacts determined in the PUF calculations to conclude that the Challenger can be offered a Contingent Contract.

2.3.3 The Evaluated POD(s)/POR(s) used to prepare the PUF calculation(s) will be determined based on the Requested POD/Requested POR as provided in the following matrix:

	Defender's Requested POR	Defender's Requested POD	Challenger's Requested POR	Challenger's Requested POD		Evaluated Demand	Evaluated POR	Evaluated POD
2.3.3.1	Any POR	Network POD	Any POR	Network POD		(A) Defender's Requested Demand	(A) Defender's Requested POR	(A) Defender's Requested POD[3]
						(B) Challenger's Requested Demand	(B) Challenger's Requested POR	(B) Defender's Requested POD[1, 3]
2.3.3.2	Any POR	Network POD	Any POR	Export POD		(A) Defender's Requested Demand	(A) Algorithm for Resources Dispatched On	(A) Defender's Requested POR[2]
						(B) Challenger's Requested Demand	(B) Challenger's Requested POR	(B) Challenger's Requested POD[2]
2.3.3.3	Any POR	Export POD	Any POR	Network POD		(A) Defender's Requested Demand	(A) Defender's Requested POR	(A) Defender's Requested POD[3]
						(B) Challenger's Requested Demand	(B) Challenger's Requested POR	(B) Algorithm for Resources Dispatched Off[3]
2.3.3.4	Any POR	Export POD	Any POR	Export POD		(A) Defender's Requested Demand	(A) Defender's Requested POR	(A) Defender's Requested POD[3]
						(B) Challenger's Requested Demand	(B) Challenger's Requested POR	(B) Challenger's Requested POD[3]

[1] Determinations of Potential Challengers where the Potential Challenger's Requested POD is Portland General Electric's system, will use an Evaluated POD of John Day Intertie 500 kV.

[2] Impacts of Path (A) are added to the impacts of Path (B) – negative values are included in this calculation (B + A).

[3] Impacts of Path (A) are subtracted from the impacts of Path (B) – negative values are included in this calculation (B – A).

2.3.4 If the LTF RENEWAL Request is CONFIRMED, there will be no change to posted LTF ATC, as posted ATC reflects the assumption that rollover rights will be exercised.

2.3.5 If the LTF DEFERRAL Request remains CONFIRMED, there will be no change to posted LTF ATC, except that ATC (long-term or short-term, whichever applies) will be released for the period of the DEFERRAL.

2.3.6 If the Challenger's Request is CONFIRMED the positive PUF calculation impacts will be decremented from posted LTF ATC values; any negative impacts will also be decremented, to increase the posted LTF ATC.

3 Related BPA Transmission Services Business Practices

3.1 BPA Transmission Service' Business Practices are available on its web page at http://www.transmission.bpa.gov/Business/Business_Practices/.

3.2 BPA Transmission Service' ATC Supporting and Related Information/Documents are available on its web page at http://www.transmission.bpa.gov/Business/Customer_Forums_and_Feedback/ATC_Methodology/

4 Version History

Version Date	Status/Summary
12/18/2006, V2	Clarified footnotes 2, 3 and 4 in section 2.2.2 and footnotes 2 and 3 in section 2.3.3, and corrected typos in sections 1.1 and 1.2.
11/20/2006, V1	This document describes the methodology for determining Long-Term Firm ATC impacts on Network Flowgates for requests for long-term firm transmission service received by BPA Transmission Services' between the updates to the planning baseline studies.